CLAIMS

1. An apparatus for inspecting a substrate comprising:

substrate holding means for holding a substrate to be inspected;

driving means for raising the substrate holding means to a predetermined angle or less;

position coordinate detecting means provided at side edge of the substrate in at least two directions, for detecting position coordinates of a defect present in the substrate;

observation system supporting means provided for supporting a micro observation system and moving on the surface of the substrate; and

controlling means for controlling of movement of the micro observation system of the observation system supporting means to correspond to the defect present in the substrate, on the basis of the position coordinates of the defect determined by the position coordinate detecting means.

2. The apparatus for inspecting a substrate according to claim 1, wherein said position coordinate detecting means comprises:

a guide scale provided along the side edge of the substrate; and

a position coordinate detecting section movably provided along the guide scale, for detecting

a position of the defect present in the substrate.

3. The apparatus for inspecting a substrate according to claim 1, wherein the observation system supporting means comprises

observation unit supporting means arranged movably in one direction of the surface of the substrate so as to cross over the substrate holding means, for supporting the observation unit including the micro observation system; said observation unit being provided movably on the surface of the substrate in the direction perpendicular to the moving direction of the observation unit supporting means.

4. The apparatus for inspecting a substrate according to claim 1, wherein the position coordinate detecting means comprises

a guide scale provided along a side edge of the substrate;

a light source section for emitting light;

reflecting means movably provided along the guide scale, for reflecting light emitted from the light source section toward the substrate side; and

a detecting section for detecting the position coordinates of the defect on the basis of a position of the reflecting means on the guide scale when the defect is irradiated with light reflected by the reflecting means.

5. The apparatus for inspecting a substrate

according to claim 4, wherein the light emitted from the light source section and reflected by the reflecting means is virtually perpendicular to the surface of the substrate.

6. The apparatus for inspecting a substrate according to claim 1, wherein the position coordinate detecting means comprises:

two guide scales provided respectively along side edges of the substrate in two directions;

a light source section for emitting light;

splitting means for splitting the light emitted from the light source section into light beams in two directions;

two reflecting means movably provided along the two guide scales respectively, each reflecting the light beam split by the splitting means toward the substrate side;

a detecting section for detecting the position coordinates of the defect on the basis of the positions of the reflecting means on the two guide scales when the defect is irradiated with two light beams reflected by the two reflecting means.

7. The apparatus for inspecting a substrate according to claim 6, wherein the light emitted from the light source section and reflected by the two reflecting means respectively, is virtually perpendicular to the surface of the substrate.

8. The apparatus for inspecting a substrate according to claim 1, wherein the position coordinate detecting means comprises

two guide scales provided along the side edges of the substrate in two directions;

two light source sections for emitting light;

two reflecting means movably provided respectively along the two guide scales, for reflecting light emitted from either one of the two light source sections toward the substrate side; and

detecting means for detecting the position coordinates of the defect on the basis of positions of the two reflecting means on the corresponding guide scales when the defect is irradiated with two light beams reflected respectively by the two reflecting means.

9. The apparatus for inspecting a substrate according to claim 8, wherein the light beams emitted from the light source sections and reflected by the two reflecting means are virtually perpendicular to the surface of the substrate.

10. The apparatus for inspecting a substrate according to claim 1, wherein the position coordinate detecting means comprises

two guide scales respectively provided along the side edges of the substrate in two directions;

two light source sections movably provided along

the two guide scales respectively, for emitting light toward the substrate side; and

detecting means for detecting the position coordinates of the defect on the basis of positions of the two light source sections on the corresponding guide scales when the defect is irradiated with two light beams respectively emitted from the two light source sections.

11. The apparatus for inspecting a substrate according to claim 10, wherein the light emitted from each of the light source section is virtually perpendicular to the surface of the substrate.

12. The apparatus for inspecting a substrate according to claim 1, wherein the position coordinate detecting means comprises

a guide scale provided along the side edge of the substrate; and

a position detector provided movably along the guide scale by electrical driving force, for detecting a position of the defect present in the substrate.

13. The apparatus for inspecting a substrate according to claim 1, wherein the position coordinate detecting means comprises

two guide scales respectively provided along the side edges of the substrate in two directions;

a light source section for emitting light;

split means for splitting light emitted from

the light source section into light beams in the two directions;

two reflecting means movably provided respectively along the guide scales, for reflecting the light beams split by the splitting means toward a substrate side;

two moving means for respectively moving the two reflecting means along the corresponding guide scales by electrical driving force;

a detector for detecting position coordinates of the defect on the basis of the positions of the reflecting means on the two guide scales when the defect is irradiated with two light beams respectively reflected by the two reflecting means.

14. The apparatus for inspecting a substrate according to claim 13, wherein each of the two moving means comprises a motor, two pulleys and a belt driven by the motor.

15. The apparatus for inspecting a substrate according to claim 13, wherein the light emitted from the light source section and reflected by the two reflecting means is virtually perpendicular to the surface of the substrate.

16. The apparatus for inspecting a substrate according to claim 1, wherein the positions coordinate detecting means comprises

two guide scales provided respectively along the side edges of the substrate in two directions;

two light source sections for emitting light;

two reflecting means movably provided respectively along the guide scales, for reflecting light emitted from either one of the two light source sections toward a substrate side;

two moving means for moving the two reflecting means along the corresponding guide scales by electrical driving force; and

a detector for detecting the position coordinates of the defect on the basis of the positions of the reflecting means on the two guide scales when the defect is irradiated with two light beams reflected respectively by the two reflecting means.

17. The apparatus for inspecting a substrate according to claim 16, wherein each of the two moving means comprises a motor, two pulley and a belt driven by the motor.

18. The apparatus for inspecting a substrate according to claim 16, wherein the light beams emitted from the light source sections and respectively reflected by the two reflecting means are virtually perpendicular to the surface of the substrate.

19. The apparatus for inspecting a substrate according to claim 1, wherein said driving means comprising:

moving means for moving back and forth with respect to the substrate holding means;

connecting means connected to the substrate holding means and the moving means, for swinging the substrate holding means with movement of the moving means.

20. The apparatus for inspecting a substrate according to claim 19, wherein said connecting means is formed by connecting a plurality of connecting members, said connecting member being rotatable to a connection receptor.